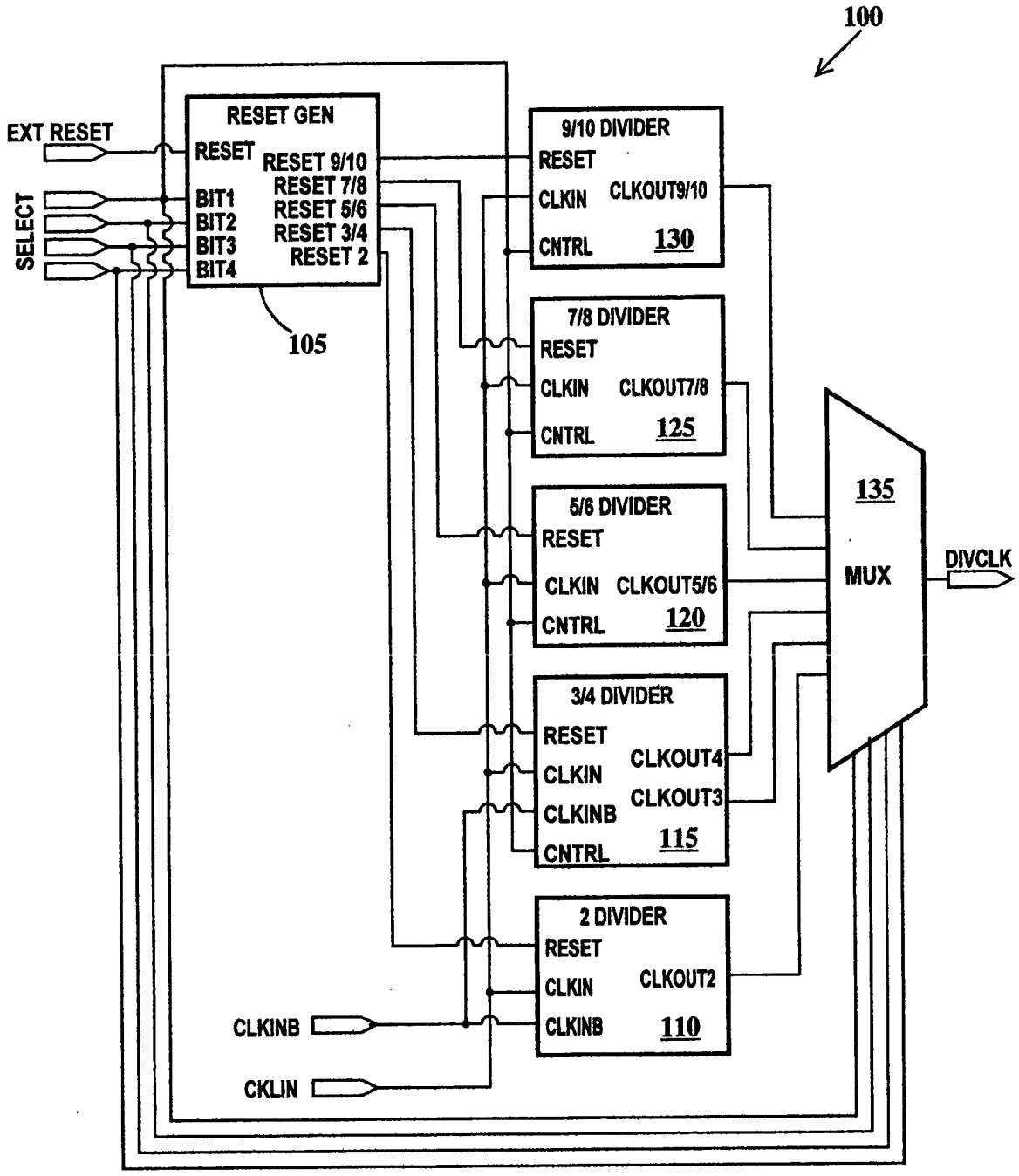
100
EXT RESET
SELECT
RESET GEN
RESET
BIT1
BIT2
BIT3
BIT4
RESET 9/10
RESET 7/8
RESET 5/6
RESET 3/4
RESET 2
105
9/10 DIVIDER
RESET
CLKIN
CLKOUT9/10
CNTRL
130
7/8 DIVIDER
RESET
CLKIN
CLKOUT7/8
CNTRL
125
5/6 DIVIDER
RESET
CLKIN
CLKOUT5/6
CNTRL
120
3/4 DIVIDER
RESET
CLKIN
CLKINB
CNTRL
CLKOUT4
CLKOUT3
115
2 DIVIDER
RESET
CLKIN
CLKINB
CLKOUT2
110
135
MUX
DIVCLK
CLKINB
CKLIN

FIG. 1

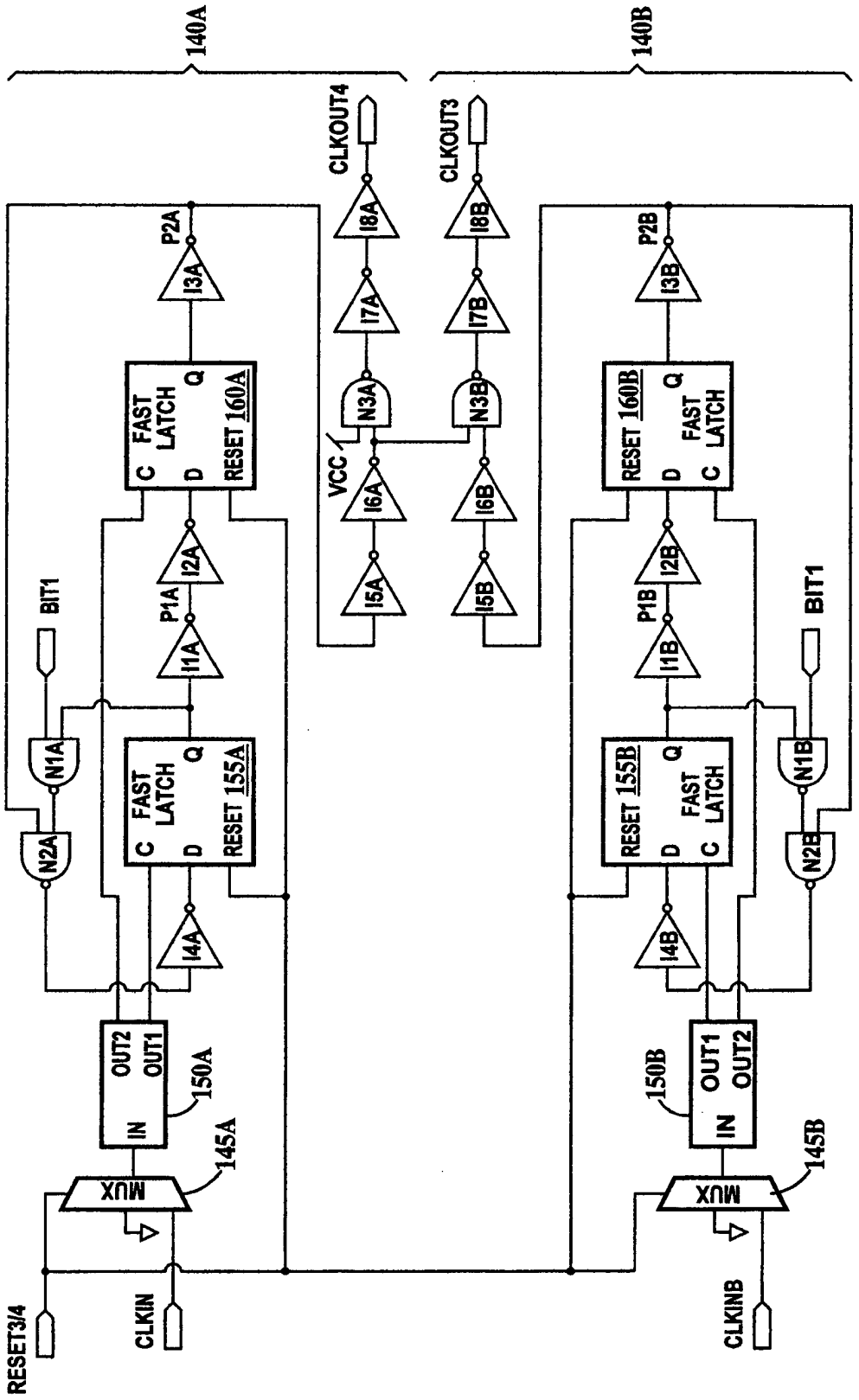
140A
140B
CLKOUT4
CLKOUT3
I8A
I8B
I7A
I7B
N3A
N3B
VCC
I6A
I6B
I5A
I5B
P2A
P2B
I3A
I3B
FAST LATCH
RESET 160A
RESET 160B
P1A
P1B
I2A
I2B
I1A
I1B
BIT1
BIT1
N1A
N1B
RESET 155A
RESET 155B
N2A
N2B
I4A
I4B
OUT2
OUT1
IN
150A
150B
145A
145B
MUX
RESET3/4
CLKIN
CLKINB

FIG. 2A

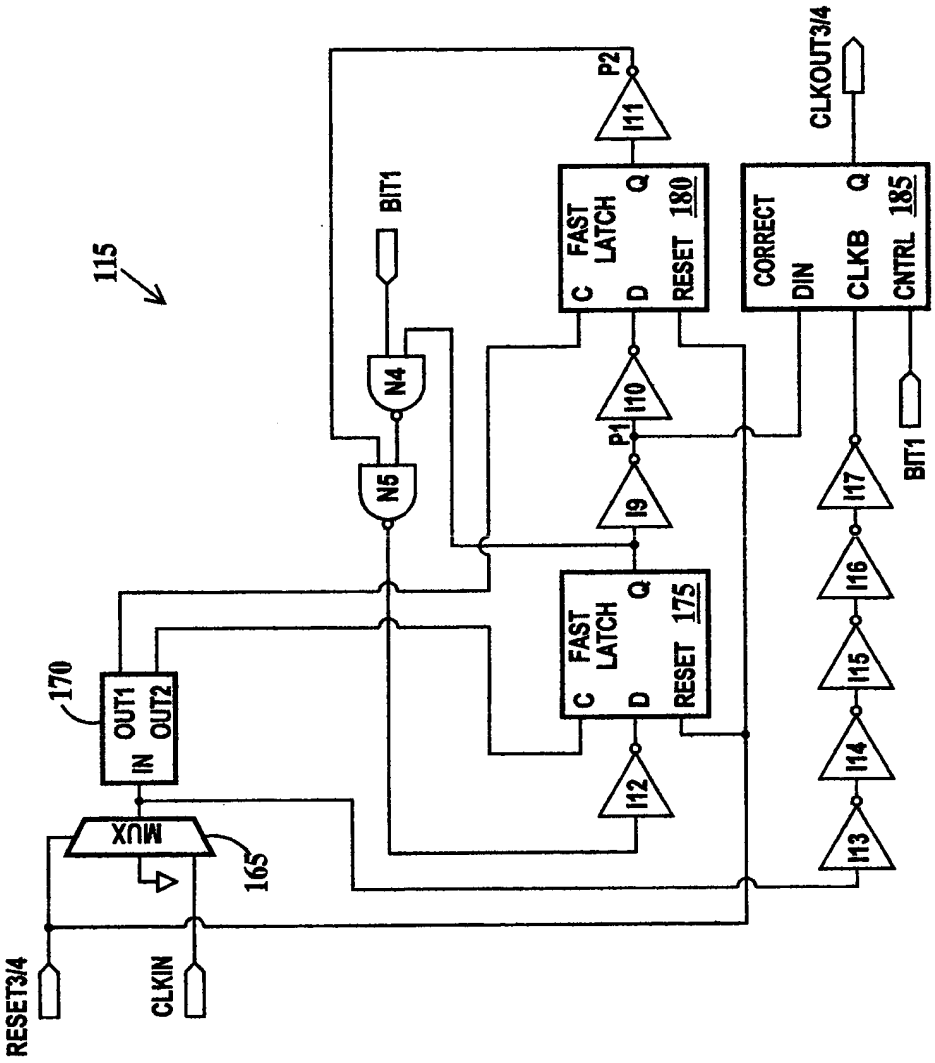
115
RESET3/4
CLKIN
MUX
165
170
OUT1
IN
OUT2
BIT1
N4
N5
P2
I11
P1
I10
I9
I12
C
FAST
LATCH
D
Q
RESET
180
175
CLKOUT3/4
CORRECT
DIN
CLKB
CNTRL
185
I17
I16
I15
I14
I13
BIT1

FIG. 2B

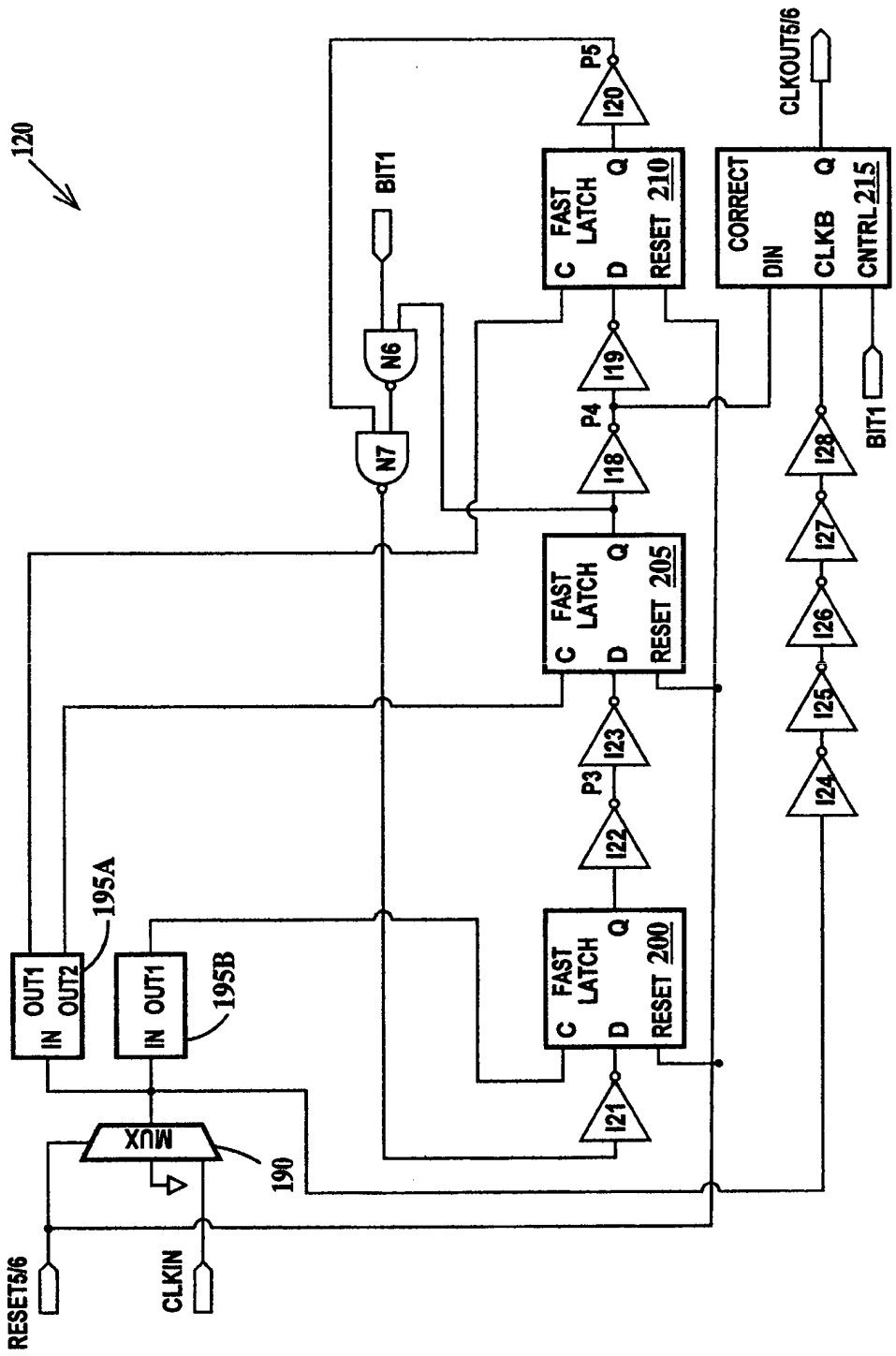
120
RESET5/6
CLKIN
MUX
190
OUT1
IN
OUT2
195A
IN
OUT1
195B
N6
N7
BIT1
P5
I20
P4
I19
P3
I18
I23
I22
I21
C
FAST
LATCH
D
Q
RESET 210
RESET 205
RESET 200
CORRECT
DIN
CLKB
CNTRL 215
CLKOUT5/6
BIT1
I28
I27
I26
I25
I24

FIG. 3

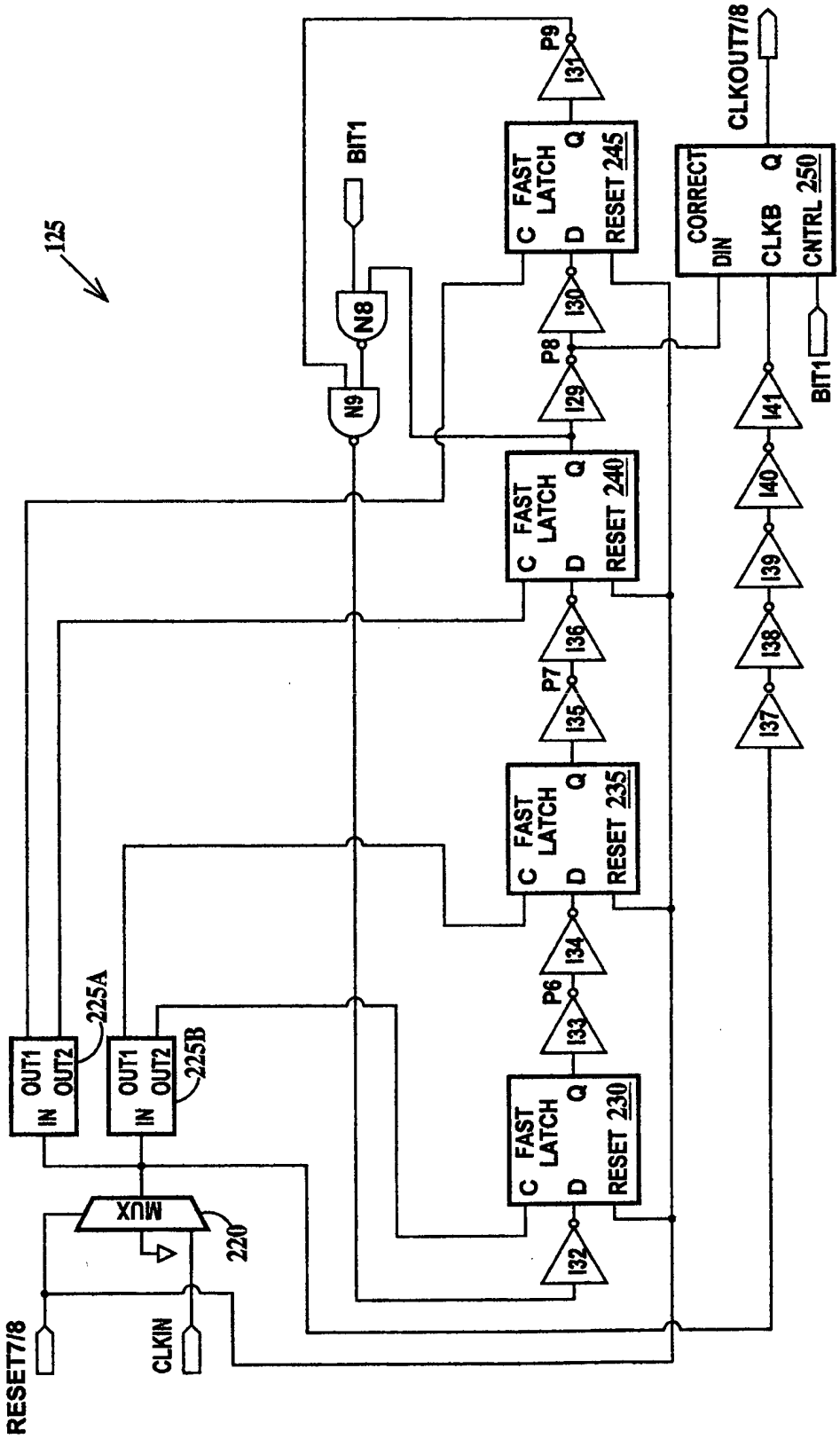
125
RESET7/8
CLKIN
MUX
220
OUT1
IN
OUT2
225A
225B
N8
N9
BIT1
P9
P8
P7
P6
I31
I30
I29
I36
I35
I34
I33
I32
C FAST LATCH D Q
RESET 245
RESET 240
RESET 235
RESET 230
CORRECT
DIN
CLKB
CNTRL 250
CLKOUT7/8
BIT1
I41
I40
I39
I38
I37

FIG. 4

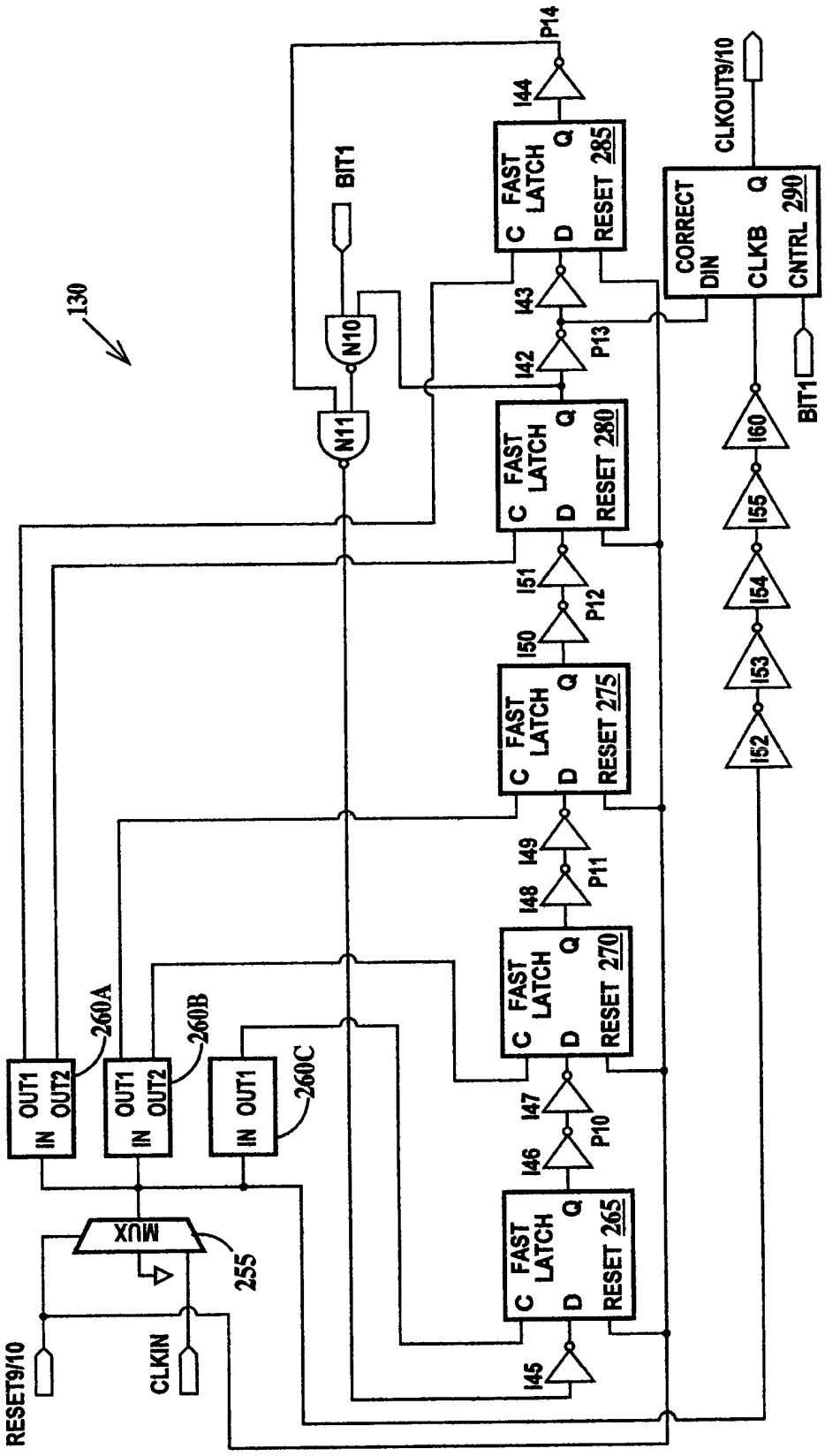
130
RESET9/10
CLKIN
MUX
255
OUT1
IN
OUT2
260A
260B
260C
BIT1
N10
N11
P14
P13
P12
P11
P10
I44
I43
I42
I51
I50
I49
I48
I47
I46
I45
I60
I55
I54
I53
I52
FAST LATCH
C
D
Q
RESET 285
RESET 280
RESET 275
RESET 270
RESET 265
CORRECT
DIN
CLKB
CNTRL 290
CLKOUT9/10
BIT1

FIG. 5

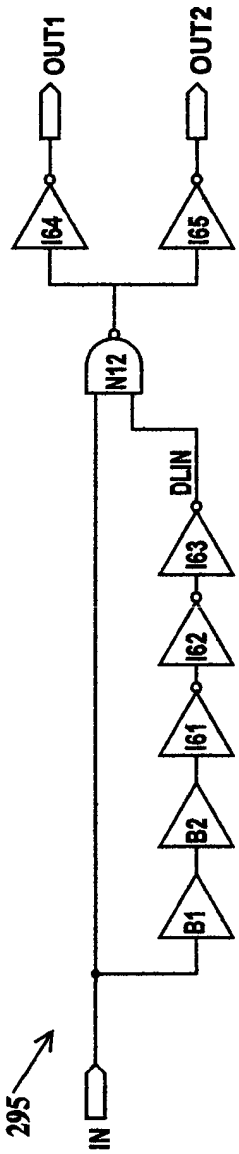
OUT1
OUT2
I64
I65
N12
DLIN
I63
I62
I61
B2
B1
295
IN

FIG. 6A

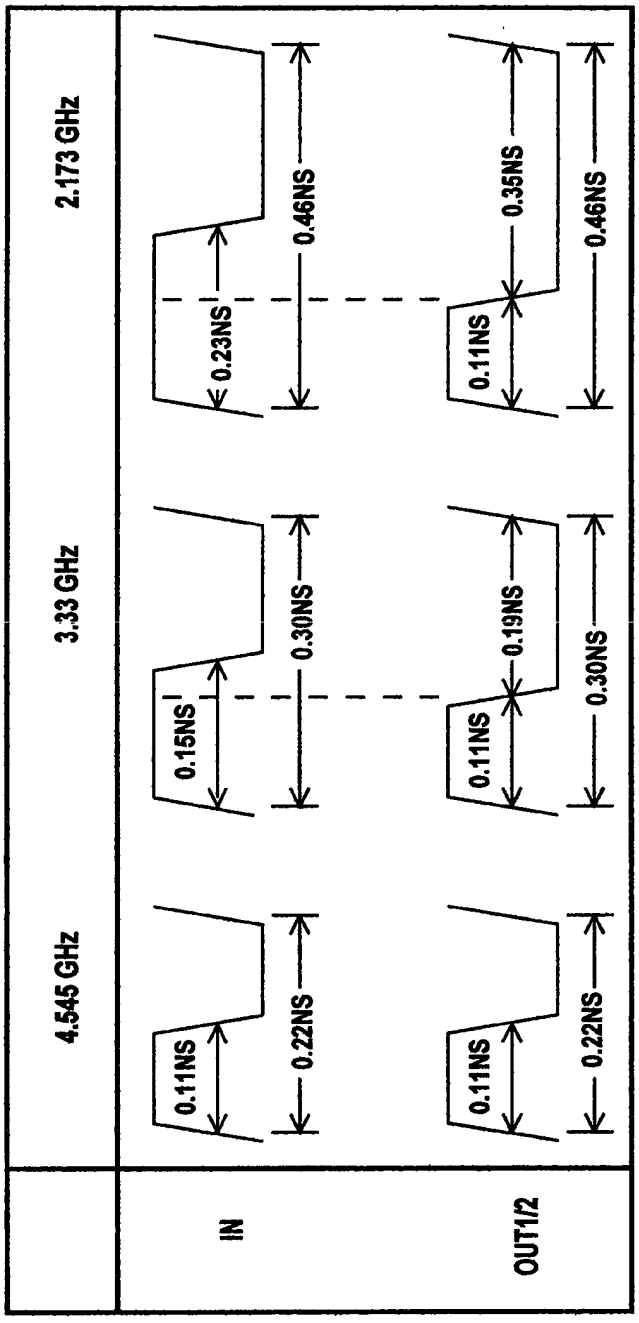
4.545 GHz
3.33 GHz
2.173 GHz
IN
OUT1/2
0.11NS
0.22NS
0.15NS
0.30NS
0.23NS
0.46NS
0.11NS
0.19NS
0.30NS
0.11NS
0.35NS
0.46NS

FIG. 6B

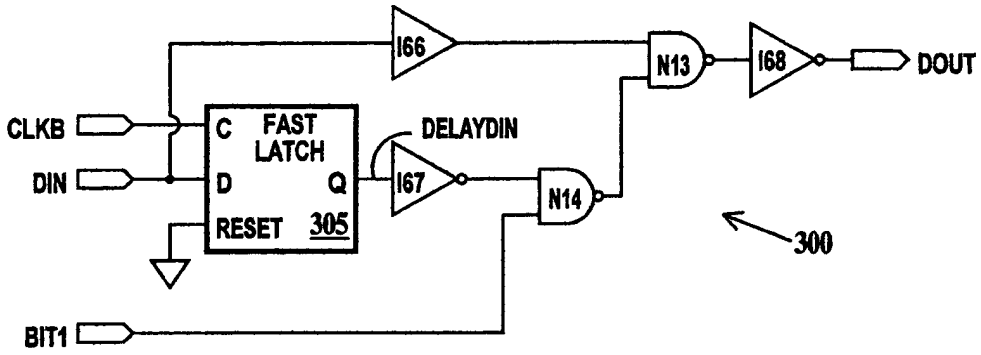
I66
N13
I68
DOUT
CLKB
C
FAST
LATCH
DELAYDIN
DIN
D
Q
I67
N14
RESET
305
300
BIT1

FIG. 7A

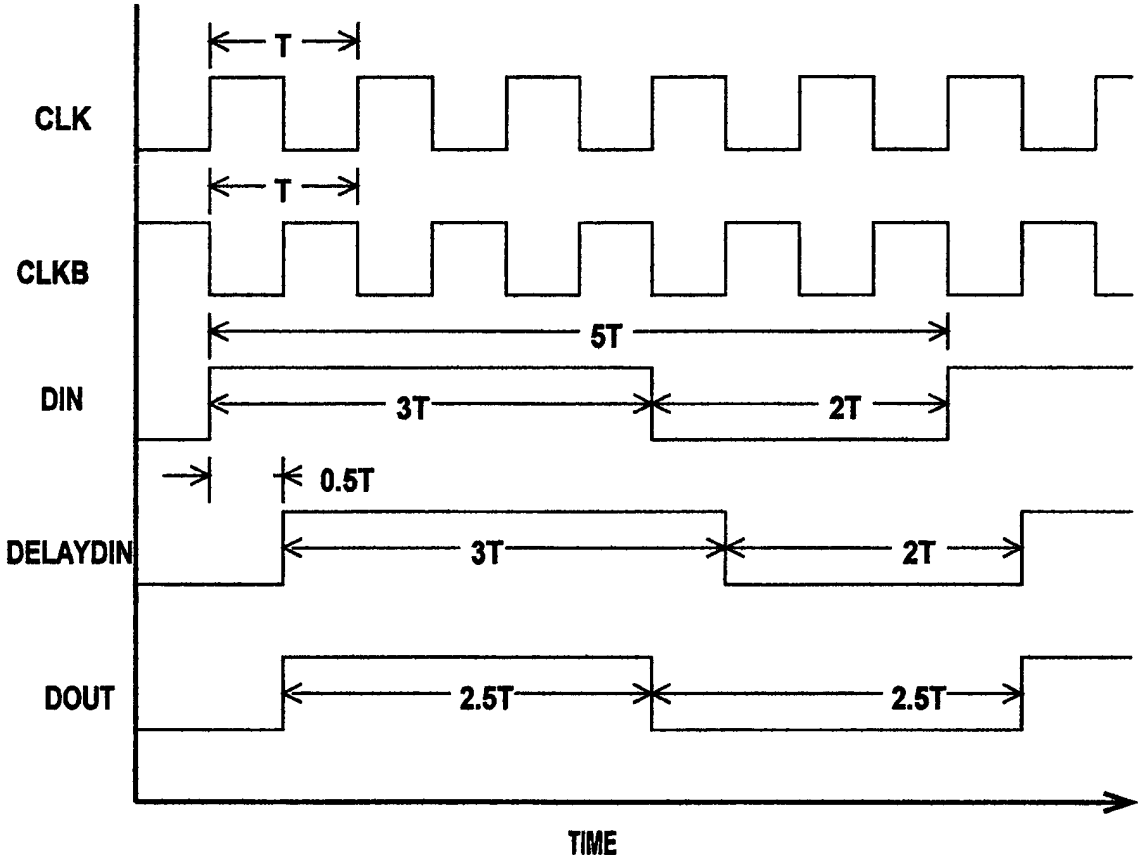
T
CLK
T
CLKB
5T
DIN
3T
2T
0.5T
DELAYDIN
3T
2T
DOUT
2.5T
2.5T
TIME

FIG. 7B

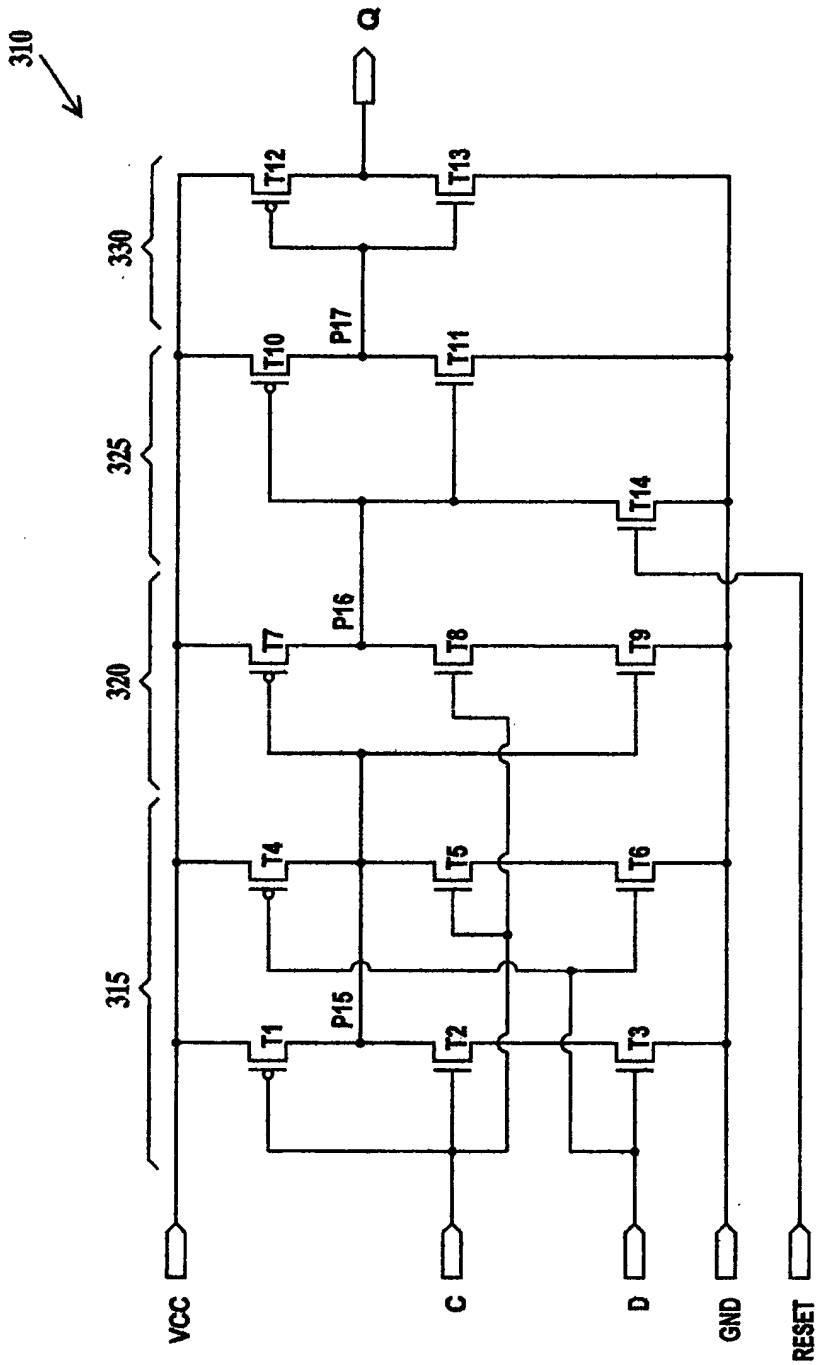
310
Q
330
325
320
315
T12
T13
P17
T10
T11
T14
P16
T7
T8
T9
T4
T5
T6
P15
T1
T2
T3
VCC
C
D
GND
RESET

FIG. 8

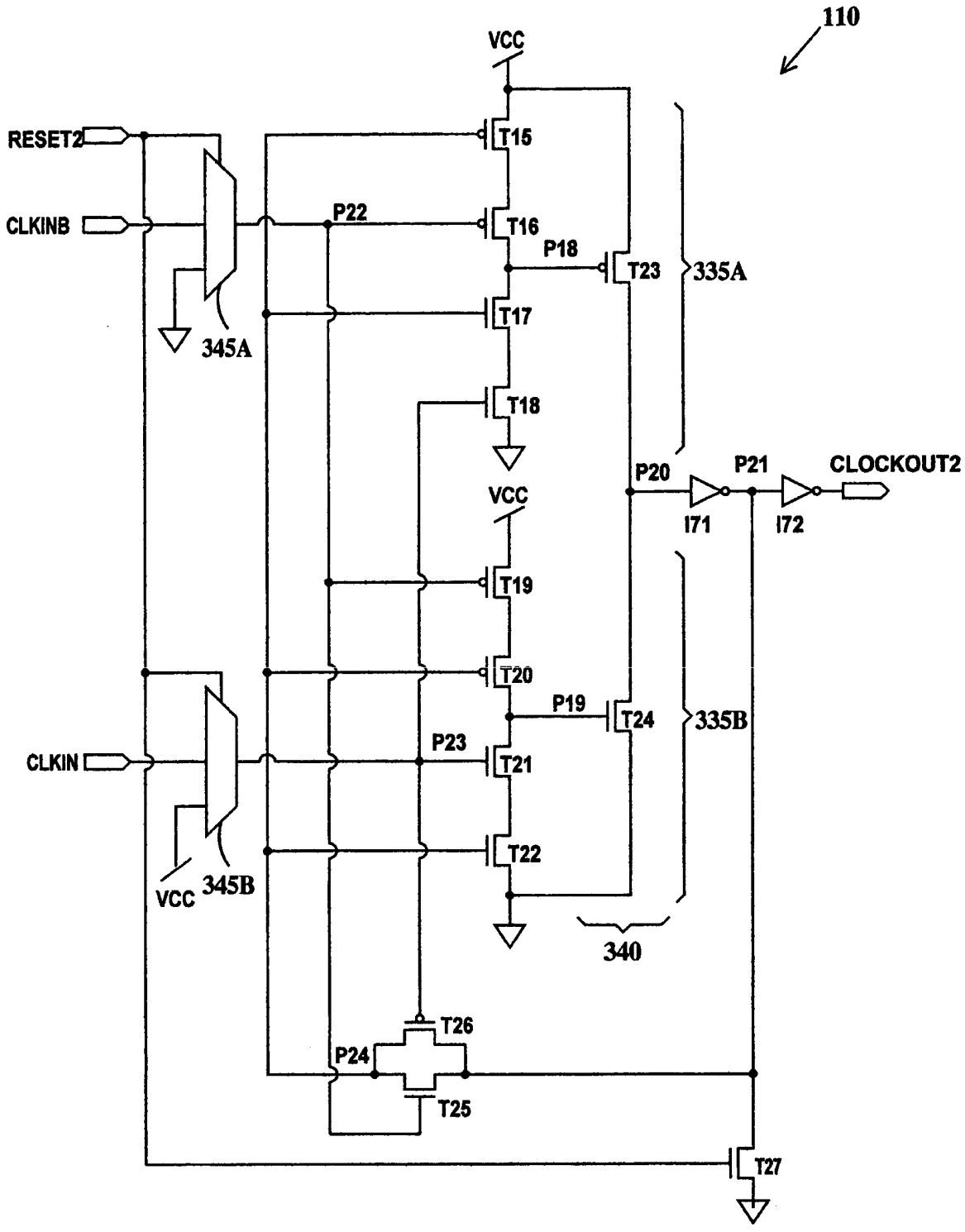
110
VCC
RESET2
CLKINB
T15
P22
T16
P18
T23
335A
T17
345A
T18
P20
P21
CLOCKOUT2
VCC
I71
I72
T19
T20
P19
T24
335B
CLKIN
P23
T21
T22
VCC
345B
340
T26
P24
T25
T27

FIG. 9